

Appendix J

EPA Protective Noise Levels

On the basis of its interpretation of available scientific information, EPA has identified a range of yearly Day-Night Sound Levels sufficient to protect public health and welfare from the effects of environmental noise. It is very important that these noise levels, summarized in Table VIII, not be misconstrued. Since the protective levels were derived without concern for technical or economic feasibility, and contain a margin of safety to insure their protective value, they must not be viewed as standards, criteria, regulations, or goals. Rather, they should be viewed as levels below which there is no reason to suspect that the general population will be at risk from any of the identified effects of noise.

Table VIII
Yearly Ldn Values That Protect Public Health and Welfare with a Margin of Safety

EFFECT	LEVEL	AREA
Hearing	Leq(24) < 70 dB	All areas (at the ear)
Outdoor activity interference and annoyance	Ldn < 55 dB	Outdoors in residential areas and farms and other outdoor areas where people spend widely varying amounts of time and other places in which quiet is a basis for use.
Outdoor activity interference and annoyance	Leq(24) < 55 dB	Outdoor areas where people spend limited amounts of time, such as school yards, playgrounds, etc.
Indoor activity interference and annoyance	Ldn < 45 dB	Indoor residential areas
Indoor activity interference and annoyance	Leq(24) < 45 dB	Other indoor areas with human activities such as schools, etc.

Outdoor yearly levels on the Ldn scale are sufficient to protect public health and welfare if they do not exceed 55 dB in sensitive areas (residences, schools, and hospitals). Inside buildings, yearly levels on the Ldn scale are sufficient to protect public health and welfare if they do not exceed 45 dB. Maintaining 55 Ldn outdoors should ensure adequate protection for indoor living. To protect against hearing damage, one's 24-hour noise exposure at the ear should not exceed 70 dB.

Perhaps the most fundamental misuse of the Levels Document is treatment of the identified levels as regulatory goals. They are not regulatory goals; they are levels defined by a negotiated scientific consensus. These levels were developed without concern for economic and technological feasibility, are intentionally conservative to protect the most sensitive portion of the American population, and include an additional margin of safety. In short, the levels in Table VIII are neither more nor less than what Congress required.

Source: Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety," EPA/ONAC 550/9-74-004, March, 1974. <http://www.nonoise.org/library/levels/levels.htm#summary>